

1 **BEFORE THE HEARING EXAMINER FOR THE CITY OF REDMOND**

2  
3  
4 **IN THE MATTER OF APPLICATION OF )**  
5 **T-MOBILE FOR A WIRELESS )**  
6 **TELECOMMUNICATIONS MONOPOLE )**  
7 \_\_\_\_\_ )

**FILE NO: CUP 02-001**

**RECOMMENDATION**

8  
9  
10 **RECOMMENDATION**

11  
12 The Hearing Examiner **RECOMMENDS** that the application of T-Mobile for a Conditional Use  
13 Permit to construct a 61 foot monopole on the NW corner of Redmond Way and 140<sup>th</sup> Avenue  
14 NE be **APPROVED**, subject to conditions.

15 **INTRODUCTION**

16  
17 The application of T-Mobile (Applicant) for a Conditional Use Permit to install a  
18 telecommunications monopole and associated ground-mounted equipment at NE Redmond Way  
19 and 140<sup>th</sup> Avenue NE came on for hearing before Gordon F. Crandall, Hearing Examiner, on  
20 April 24, 2003 at 7:00PM. The Technical Committee Report was presented by Dana Farwell,  
21 planner. Testifying under oath for Applicant were:

22 Craig Walkenhorst, SecuraSite LLC

23 Joe Tseng, RF Engineer

24 Also testifying under oath were:

25 Neelesh Kamkolkar, 13945 Redmond Way

26 Yuri Alkin, 8420 143<sup>rd</sup> Ct NE

27 Johnny Baginley Jr., 13940 Redmond Way

28 Paul Smith, 13929 Redmond Way

29 Ron Mebust, 8225 140<sup>th</sup> Avenue NE

30 Akila Ramani, 14116 NE 85<sup>th</sup> Ct

Anna Dayen, 8420 143<sup>rd</sup> Ct NE

1  
2  
3 The following exhibits were offered and admitted:

4 Exhibit A: Technical Committee Report dated April 24, 2003 with Attachments

5 Exhibit B: Schematics, Elevations, and Structural Drawings Submitted by T-Mobile

6 Exhibit C: Peer Review Email from Joe Blaschka, Jr. P.E. of ADCOMM Engineering  
7

8 The hearing adjourned after 9:00PM and was continued to Monday, April 28<sup>th</sup> 2003, at 7:00PM.  
9

10 Testifying under oath on that date for Applicant were:

11 Joe Tseng, RF Engineer

12 Chris Arena, Project Manager

13 Mike Roy, RF Engineer

14 Craig Walkenhorst, SecuraSite LLC

15 Also testifying under oath were:

16 Dana Farwell, planner

17 Judd Black, Development Review Manager

18 Yuri Alkin, 8420 143<sup>rd</sup> Ct NE

19 Neelesh Kamkolkar, 13945 Redmond Way

20 Johnny Baginley Jr., 13940 Redmond Way

21 Sharon Nakamura, 4930 26<sup>th</sup> South, Seattle

22 Andy Teng, 14203 NE 86<sup>th</sup> Place

23 Marc Quintal, 13939 Redmond Way

24 Christine Chen, 8428 143<sup>rd</sup> Ct NE

25 Anna Dayen, 8420 143<sup>rd</sup> Ct NE

26 Dave Gann, 14106 NE 84<sup>th</sup> Street  
27

28 The following exhibits were offered and admitted;

29 Exhibit D: Affidavit of Qualification and Certification for T-Mobile Facility from

30 Hatfield & Dawson Consulting Engineers, dated April 24, 2003

- 1 Exhibit E: Brochure 'Questions about Wireless Antennas'
- 2 Exhibit F: Report on 'Frequently Asked Questions' submitted by T-Mobile
- 3 Exhibit G: Map of Drive Test Data Depicting Gaps in Coverage in Redmond
- 4 Exhibit H: Memo from Mike Roy, T-Mobile Explaining the Need for a new Cell-Site,
- 5 dated April 28, 2003
- 6 Exhibit I: Memo from Dana Farwell, Planner, Answering Queries from Citizens
- 7 from April 24, 2003 Hearing, dated April 28, 2003
- 8 Exhibit J: Petition Presented by Concerned Citizens re: Proposed T-Mobile Project
- 9 Exhibit K: Notice of Final Decision on T-Mobile's Application
- 10 Exhibit L: Paper on 'Biological Effects of Radiofrequency Radiation from Wireless
- 11 Transmission Towers' by Henry Lai
- 12 Exhibit M: Request to Reject Application Submitted by Neighbors
- 13 Exhibit N: Letter from Neelesh Kamkolkar, dated April 28, 2003
- 14 Exhibit O: Letter from Meera Krishna, dated April 28, 2003
- 15 Exhibit P: Letter from Meera Krishna, dated April 28, 2003
- 16 Exhibit Q: Article from The Business Journal, dated January 28, 2003
- 17 Exhibit R: Paper by R Santini on 'Study of the Health of People Living in the
- 18 Vicinity of Mobile Phone Base Stations'
- 19 Exhibit S: Letter from Qiang Wang, dated April 28, 2003
- 20 Exhibit T: Letter from Anna Dayen, dated April 28, 2003
- 21 Exhibit U: Letter from Dave Gann, dated April 28, 2003
- 22 Exhibit V: Collection of Emails Submitted by Dana Farwell, Planner
- 23 Exhibit W: Staff Powerpoint Presentation
- 24 Exhibit X: Response Memo to Hearing Examiner from Dana Farwell, re:
- 25 'Demonstration of Need', dated May 12, 2003
- 26 Exhibit Y: Response Memo to Hearing Examiner from T-Mobile dated May 30, 2003

27

28 At the conclusion of the hearing, Judd Black, Development Review Manager, requested a

29 continuance in order to do further research to determine whether Applicant had demonstrated a

30 need for a pole at this location. The Hearing Examiner granted the City two weeks to report its

1 findings. On May 12, 2003, Dana Farwell, planner, reported the results of the City's research.  
2 She advised that the Federal Communications Commission (FCC) did not have any standards or  
3 criteria that defined the need for a monopoly and leaves the question to the local jurisdiction. The  
4 FCC does have strict regulations protecting the rights of cellular carriers that provide that a City  
5 cannot bar a carrier from providing service.

6  
7 Ms. Farwell contends that "need" should be demonstrated not only through gaps in coverage but  
8 also through a separate showing of a demand for services. She asked that Applicant provide not  
9 only RF reports but also drive tests, a list or summary of service complaints, proof of the  
10 percentage of dropped calls and other evidence to show a need for the monopoly. She concluded  
11 that applicant had not shown that the monopoly was "absolutely necessary" in this location to  
12 meet the demands of its users. She asked permission to reconsider the City's recommendation if  
13 need cannot be demonstrated.

14  
15 T-Mobile USA responded to her City's memoranda on May 30, 2003. In it's memorandum, T-  
16 Mobile made the following points:

- 17  
18 1. The Decision Criteria in the RCDG does not require proof that a monopoly is "absolutely  
19 necessary", and such a standard here would be discriminatory.
- 20 2. The City's memorandum ignored the results of the peer review requested by the City  
21 which supported Applicant's position on need.
- 22 3. Reliance upon alleged health concerns from radio emissions was misplaced, as the  
23 Telecommunications Act prohibits the City from regulating the placement of personal  
24 wireless service facility on the basis of the environmental effects of radio frequency  
25 emissions if such facilities comply with the FCC's regulations concerning emissions. 47  
26 U.S.C. § 332
- 27 4. T-Mobiles' evidence of need for the facility included drive tests by T-Mobile, drive test  
28 analysis of Telephia (which is equipped with drive tests and equipment pertaining to  
29 numerous carriers and publishes comparative data) and propagation studies indicating  
30 gaps in coverage. There was no credible, science-based evidence to the contrary.

- 1 5. The Hearing Examiner should rely upon evidence in the record that is reliable, relevant  
2 and of probative value.

3  
4 T-Mobile asked that the Hearing Examiner render a decision that applies the applicable  
5 decision criteria and reject the “absolutely necessary” standard urged by the City.

6 The record was then closed.

7  
8 From the foregoing the Hearing Examiner makes the following:

9  
10 **FINDINGS OF FACT**  
11

- 12 1. *Proposal.* T-Mobile proposes to install a telecommunications monopole with associated  
13 ground equipment in the right-of-way on the NW corner of NE Redmond Way and 140<sup>th</sup>  
14 Avenue NE. The proposed antenna would be located within a canister on top of a wooden  
15 pole for a total height of 64 feet. All cables and wires would be contained within the  
16 hollow laminated pole. Landscaping and fencing would screen the ground-related  
17 equipment. The proposal requires a Conditional Use Permit.
- 18  
19 2. *Neighborhood/Zoning.* The site is in the Rose Hill Neighborhood and adjacent properties  
20 are zoned R-4. All uses in the vicinity are single-family residential or vacant City  
21 property.
- 22  
23 3. *Public Notice.* Public notice of the application for a Conditional Use Permit and the  
24 public hearing was given as required by ordinance.
- 25  
26 4. It was established by the propagation studies, ground tests, and customer complaints that  
27 there is a gap in coverage along NE Redmond Way and 140<sup>th</sup> NE, and that an additional  
28 wireless telecommunications facility is needed at this location to provide adequate  
29 service.  
30

- 1 5. *RF Emissions.* The RF emissions from the proposed facility will comply with the FCC  
2 regulations concerning emissions.  
3
- 4 6. *Alternatives.* There are no alternative locations that would provide the coverage needed.  
5 Locations considered were either too far away or too low in elevation to provide the  
6 service.  
7
- 8 7. *Property Values.* There were complaints from nearby homeowners that the proposed  
9 monopole would adversely affect their property values. To the extent that such concerns  
10 are based on asserted health risks, the evidence may not be considered. There was no  
11 appraisal testimony to support the effects of RF emissions on property values.  
12
- 13 8. *Peer Review.* The City submitted the application to an independent radio frequency  
14 engineer and requested peer review of applicant's proposal. It was his conclusion that  
15 applicant's consultant properly conducted the study and that the frequency strength  
16 necessary to secure proper service at this location required a pole 63.5 feet in height with  
17 antenna with one or more carriers extending up to 71 feet. Applicant is seeking approval  
18 of a pole and antennae to a maximum of only 64 feet.  
19
- 20 9. *Public Input.* Numerous members of the public residing near the site expressed  
21 opposition to the proposal. Neelesh Kamkolkar, 13945 NE Redmond Way, had concerns  
22 about health risks from radio frequency emissions, and the effect of these fears on  
23 prospective purchasers of homes in the area. He urged an alternate location. Yuri Alkin,  
24 8420 143<sup>rd</sup> Ct NE, also expressed health concerns and the effect of the monopole on  
25 property values. He presented a petition from neighbors opposing the pole as unneeded  
26 here. He also presented a memorandum from Henry Lai concerning health hazards of  
27 radio emissions. Johnny Baginley Jr., 13940 NE Redmond Way, was worried that the  
28 pole would be 50 feet from his bedroom. He was concerned about safety and whether  
29 alternative locations were available. He asked numerous questions such as 'why here,  
30 where do the underground wires go, why a new pole, who would benefit, will the pole

1 block my driveway,' etc. He said that the City did not give the neighbors sufficient time  
2 to consider the application. He also said that trees would have to be taken out, and  
3 wondered what would happen if the road was widened. He asked for proof of  
4 complaints of poor service, and urged an alternate location. Paul Smith, 13929 NE  
5 Redmond Way, expressed concern about the effect of the pole on his desire to sell his  
6 home. Traffic is a problem. Sharon Nakamura, 4930 26<sup>th</sup> South, a Seattle resident, felt  
7 that the City should not burden homeowners with this facility, as it was a commercial  
8 intrusion. Andy Teng, 14203 NE 86<sup>th</sup> Place, spoke on behalf of his neighbor, Chris  
9 Wang. He is a T-Mobile customer and had no problem with his service. Marc Quintal,  
10 13939 NE Redmond Way, reiterated the concerns about an alternate area, health hazards,  
11 and effect on property values. Christine Chen, 8428 143<sup>rd</sup> Ct NE, agreed with the prior  
12 speakers and was anxious about health. Ron Mebust, 8225 140<sup>th</sup> Avenue NE, was  
13 concerned about getting "zapped" if he was on his roof. He urged a study on safety on the  
14 monopole and it's antenna. Akila Ramani, 14116 NE 85<sup>th</sup> Ct, was a concerned mother of  
15 children and suggested relocating the pole across the street on the detention pond. Anna  
16 Dayen, 8420 143<sup>rd</sup> Ct NE, expressed health concerns and did not think this pole would be  
17 much of an improvement. Neelesh Kamkolkar, 13945 NE Redmond Way, demonstrated  
18 the interference that a cell phone makes to a radio receiver. He reported that T-Mobile's  
19 sales personnel told him that coverage was good in this area. Anna Dayen, 8420 143<sup>rd</sup> Ct  
20 NE, said that T-Mobile told her that it had excellent coverage in the area. Dave Gann,  
21 14106 NE 84<sup>th</sup> Street, a T-Mobile customer, agreed with Ms. Dayen. He had good  
22 coverage he said.

23  
24 10. Any conclusion of law deemed to be a finding of fact is hereby adopted as such.

### 25 26 CONCLUSIONS OF LAW

- 27  
28 1. *Jurisdiction*. An application for a Conditional Use Permit requires a Type IV review  
29 procedure. It is a quasi-judicial proceeding in which the City Council makes a final  
30 decision after a public hearing and recommendation from the Hearing Examiner. RCDG  
20F.30.45.

1  
2 2. *Criteria for Approval.* The criteria for approval of a telecommunications facility in a  
3 right-of-way and in a residential area are extensive. First, applicant is subject to the  
4 City's standards for construction in the right-of-way. A street use permit and franchise  
5 agreement from the City is required. The aerial services to the existing utility pole must  
6 be placed underground across NE Redmond Way and to the existing house.

7  
8 Next, the proposal must satisfy the special use criteria that govern telecommunications  
9 facilities (RCDG 20D.170.45). The proposed height of the pole and antenna (64 feet) are  
10 within the height limits. (CTR5-6) Because it is in a low-moderate zone, it must also  
11 satisfy the special exception criteria. RCDG 20D.170.45-080. This requires applicant to  
12 demonstrate that its inability to receive a communication signal is a result of factors  
13 beyond its control, and that it has used materials, shapes, and colors for the facility to  
14 minimize negative visual impacts. Staff discussion is at pages 6-7 of the TCR, and it  
15 concludes that these criteria are satisfied.

16  
17 Where a tower exceeds height limits, it must use the essential public facilities process for  
18 site and height approval. This allows consideration of more than one alternative site, may  
19 require consideration of sites outside the City, and requires an amplified public  
20 involvement process. RCDG 20F40.80-050. Staff discussion at pages 7-10 concludes  
21 that applicant has met the requirements of this process.

22  
23 Finally, the general siting criteria for broadcast and relay towers provide that such  
24 facilities are most appropriate in industrial, manufacturing, business and commercial  
25 zones, in that order, before being located in residential zones. Staff concluded (page 10,  
26 TCR) that Applicant had demonstrated that the coverage gap could not be covered by  
27 location of the facility in any zone other than a residential zone.

28  
29 3. Mobile telecommunication facilities are regulated by federal law in 47 USC 332.  
30 Subsection (c)7 of that provision deals with local zoning authority. It provides that:



1  
2       *Except as provided in this paragraph, nothing in this chapter shall limit or affect*  
3       *the authority of a State or local government or instrumentality thereof over*  
4       *decisions regarding the placement, construction, and modification of personal*  
5       *wireless service facilities.*  
6

7       Local government must not unreasonably discriminate among providers of functionally  
8       equivalent services or prohibit or have the effect of prohibiting the provision of personal  
9       wireless services. It shall act on a request for authorization to place, construct or modify  
10      personal wireless service facilities within a reasonable time, and any decision to deny  
11      such a request shall be in writing and supported by substantial evidence contained in a  
12      written record. Finally,  
13

14       *No State or local government or instrumentality thereof may regulate the*  
15       *placement, construction, and modification of personal wireless service facilities*  
16       *on the basis of the environmental effects of radio frequency emissions to the*  
17       *extent that such facilities comply with the Commission's regulations concerning*  
18       *such emissions.*  
19

- 20      4. The Hearing Examiner granted the City staff an additional two weeks to review their  
21      conclusions in light of questions raised by members of the public. Staff was convinced  
22      that Applicant may not have adequately demonstrated that a monopole was needed at  
23      this location to provide adequate coverage. As a result of its additional review, City staff  
24      concluded that Applicant had not adequately shown that the monopole “absolutely  
25      necessary” in this location to meet the demands of its users. They asked that Applicant  
26      be required to provide RF reports, drive tests, a list or summary of complaints, proof of  
27      percentage of dropped calls and other evidence to show a need for the pole from the  
28      users as well as the carrier’s perspective.  
29  
30

1 5. Applicant's responded that the criteria for location of the monopole did not require a  
2 showing of "absolute necessity", that staff had ignored the favorable peer review which  
3 the City itself had required and paid for, that health claims were unfounded and could  
4 not be used to regulate the location of the facility if FCC emission standards were met,  
5 and that it had made a compelling case that a facility was needed within the vicinity of  
6 this location to serve a major dead spot in its coverage.

7  
8 6. The concerns of residents of this area were based mainly upon perceived health risks  
9 from RF radiation. The antennae on the pole here will be from 61 to 64 feet in the air,  
10 and emissions will be directed laterally, not downward. The power of the transmitter  
11 will be within the FCC regulations, and will provide not health risk to the public or to  
12 nearby residents.

13  
14 Some of the opponents made telephone calls to T-Mobile sales personnel, who advised  
15 them that coverage in the area was "good". These personnel cannot be expected to  
16 provide definitive information as to whether there are gaps in coverage which require  
17 expensive additional facilities. One would not expect a sales representative to advise a  
18 potential customer that the company's coverage was lacking in any way. This is an area  
19 reserved for technical staff, who testified under oath at the hearing that there are  
20 significant gaps in coverage along NE Redmond Road.

21  
22 7. The Hearing Examiner is convinced that Applicant has satisfied the multiple criteria for  
23 location of this monopole, and that staff's requests for additional information are either  
24 excessive or redundant. It is the Hearing Examiner view that the Technical Committee  
25 Report correctly assessed the facts and law in the matter in its' report, and that its'  
26 conclusion that the Conditional Use Permit should be granted is correct.

27  
28 8. Any finding of fact deemed to be a conclusion of law is adopted as such.  
29  
30

1 **RECOMMENDATION**

2

3 The Hearing Examiner **RECOMMENDS** that the application of T-Mobile for a Conditional Use

4 Permit to construct a 61-foot monopole on the NW corner of NE Redmond Way and 140<sup>th</sup>

5 Avenue NE be **APPROVED**, with conditions as set forth in Attachment A.

6

7 Dated this 18<sup>TH</sup> day of June 2003.

8

9

10 /s/ Gordon F. Crandall

---

11 **GORDON F. CRANDALL**

12 **HEARING EXAMINER**

13

14 Attachment A: Conditions of Approval

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30

**PROCEDURE FOR RECONSIDERATION**

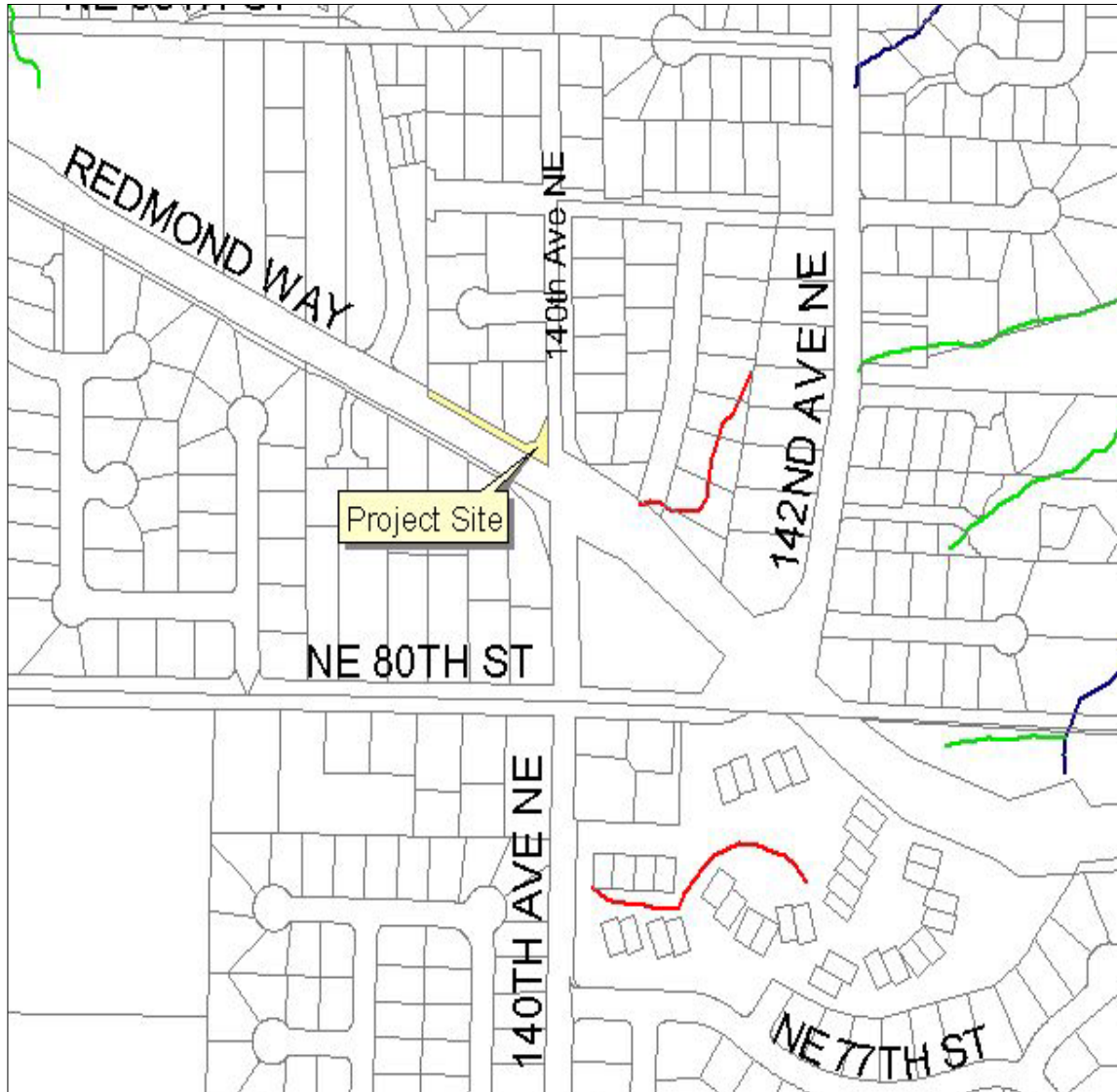
Any interested person (party of record) may file a written request for reconsideration with the Hearing Examiner. The request for reconsideration shall explicitly set forth alleged errors of procedure or fact. The final date for motion for reconsideration is **5:00 P.M. on July 2 , 2003**, and should be sent to the **Office of the Hearing Examiner**, City of Redmond, MS: PSFHE, 8701 160<sup>th</sup> Avenue N.E., PO Box 97010, Redmond, Washington, 98073-9710.

**NOTICE OF RIGHT OF APPEAL**

You are hereby notified that the foregoing Findings of Fact, Conclusions, and Recommendations are the final action on this application subject to the right of appeal to the Redmond City Council. Appeal procedures are governed by RCDG 20F.30.40-110 (Ordinance 2118) to which the reader is referred for detailed instructions. The written appeal must be received by the **Redmond Permit Center** no later than **5:00 P.M. on July 2 , 2003, or within 10 business days following final action by the Hearing Examiner if a request for reconsideration is filed.** Please include the application number on any correspondence regarding this case.

The following statement is provided pursuant to RCW 36.70B.130: “Affected property owners may request a change in valuation for property tax purposes notwithstanding any program of revaluation.”

ATTACHMENT A



# CONDITIONS OF APPROVAL

## PLANNING - SITE SPECIFIC CONDITIONS

Contact: Dana Farwell, Planner

Phone: 425 556-2437

Email: dfarwell@ci.redmond.wa.us

### A. General Planning Requirements:

This approval is subject to all general criteria of the Redmond Community Development Guide and Redmond Municipal Code. Please refer to Attachment A, General Planning Approval Conditions, for a checklist of drawing, bond, and general planning requirements. The checklist does not substitute for the code; it is intended to be used as a guide in preparing your final construction drawing/building permit submittal. Refer to the Redmond Community Development Guide and Redmond Municipal Code for detailed information on each requirement.

### B. Specific Planning Requirements:

#### 1. Landscaping:

Prior to issuance of the building permit the applicant shall submit a final landscape plan to the Planning Department for review and final approval. The plan shall comply with and/or identify the following:

- a. A qualified landscape architect shall prepare the plan.
- b. The plan shall identify proposed plantings at the base of the monopole and around the ground equipment screening (fence). A variety of native, drought tolerant species, including medium and tall shrubs, soil amendments and other planting related details shall be identified at the base of the of monopole and around the ground equipment screening (fence). A detailed Plan Schedule shall also be provided.
- c. The required landscape bond, as listed under the attached General Planning Approval Conditions shall also cover the cost of the fence, labor and materials.
- d. Regularly scheduled hand-watering shall be part of the approved landscape plan.

#### 2. Monopole:

- a. The monopole shall be constructed of a wood laminate. The wood laminate structure shall be hollow, and capable of containing all service and operational cables for this antenna.

- 1 b. The monopole (including the antennas) shall not exceed 64' in height. All cables  
2 shall be contained within the monopole structure, and antennas shall be contained in a  
3 canister (shroud). No exterior conduit, located on the sides of the monopole, shall be  
4 permitted. No antenna or other attachments will be allowed to project from or be  
5 attached to the proposed monopole. The canister antenna will be painted to match the  
6 proposed monopole.
- 7
- 8 c. Please note, lighting is not required, but if proposed any exterior lighting fixtures  
9 used to illuminate the equipment at the base of the monopole shall be identified with  
10 the building permit submittal. Fixtures shall be of a type that does not permit upward  
11 glare into the dark night sky. Such fixtures are also known as "cut-off" fixtures.  
12 Light trespass onto adjacent properties shall not be permitted. Light fixture details,  
13 which demonstrate how lighting will be restricted, shall be provided with the building  
14 permit application. Please Note: The lighting manufacturer or sales rep may be able to  
15 provide details on "cut-off" fixtures. Such documentation may take the form of a  
16 brochure and/or letter from the manufacturer or sales rep and shall be submitted with  
17 the building permit.
- 18
- 19 d. The facility owner shall remove the monopole, associated ground mounted equipment  
20 and fencing within 12 months of the date the facility ceases to be operational, or if the  
21 facility falls into disrepair and is not maintained. Disrepair includes structural  
22 features, paint, landscaping, or general lack of maintenance, which could result in  
23 safety or visual impacts. The conditions shall apply even in the event of ownership  
24 change of the facility.
- 25
- 26 e. From the date of this approval, the monopole shall be reviewed for continued use at  
27 5-year intervals. Rapid technological advancements, changing markets, and  
28 regulatory interpretations indicate the need to periodically review the appropriate  
29 design of broadcast and relay towers and monopoles. The applicant or future owner,  
30 or operator, of the monopole shall be responsible for contacting the City of Redmond

5 years from the date of this approval, and at following 5 year intervals, to begin the process of reviewing the appropriate design of the monopole. The City reserves the rights to require redesign of the monopole and attached antennas if advancements in technologies dictate.

f. The base of the monopole and ground mounted equipment shall be landscaped in accordance with the approved landscape plan.

g. The proposed landscaped areas shall be irrigated. Hand-watering is an acceptable method with an agreed-upon schedule.

## **I. ENGINEERING/TRANSPORTATION**

Contact: Steve Rountree

Phone: 425-556-2877

Email: [sroundtree@ci.redmond.wa.us](mailto:sroundtree@ci.redmond.wa.us)

### **A. Streets, Sidewalks, Access, and Related Improvements:**

#### **1. Specific Requirements:**

a. A City of Redmond Telecommunications Franchise will be required prior to issuing a building permit. Contact Steve Rountree at (425) 556-2877 for information regarding this process.

#### **b. Conversion of aerial utilities (Power, Telephone, Cable, etc.):**

- The aerial services to the existing pole shall be placed underground across Redmond Way and to the existing house according to 20D.220.10 "Underground Wiring" in the Redmond Community Development Guide.

#### **2. General Requirements:**



1 a. Sight Distance

- 2 1) The appropriate sight distance triangles shall be drawn on the civil and  
3 landscaping plans. Adequate entering sight distance shall be  
4 maintained at all connections to public streets in accordance with  
5 Section 20D.210.25 "Sight Clearance at Intersections" of the *Redmond*  
6 *Community Development Guide*, pages 347 and 348.

7 b. Signs and Striping

- 8 1) The existing and proposed channelization shall be shown on the site plan  
9 for all streets adjacent to the site and within 150 feet of the site property  
10 line. This should include the location of all fog lines, center stripes, stop  
11 bars and directional arrows.  
12

13  
14 **GENERAL CONDITIONS**

15  
16 A. Processing and Other Requirements

- 17  
18 1. Engineering Plans: For on-site and off-site drainage (storm water management), clearing,  
19 grading, utility and street improvements are required. The plans shall be prepared  
20 by a registered engineer and shall be reviewed and approved by Public Works  
21 Department prior to issuance of the building, foundation, clearing and grading or  
22 street use permits. Plan size must be 22" x 34" at a scale of 1" = 20' unless  
23 otherwise approved by the City.

24 The following design manuals should be obtained to guide design work:

- 25  
26
  - Standard Specifications and Details
  - Clearing, Grading and Storm water Management Redmond Technical Notebook
  - Design Requirements for Water and Sewer System Extensions
  - Community Development Guide

27  
28  
29 These manuals reference a number of other commonly used engineering standards. It is  
30 vital the design professional performing this work be aware of the City and other

1 pertinent standards to reduce review time. *The City will not accept designs that deviate*  
2 *from the standards without substantial justification.* Early consultation between design  
3 professionals and City staff is highly recommended if a design will propose deviations.  
4

5 Plans shall include a composite drawing that includes all utilities, landscaping, including  
6 trees, sprinklers, fire lines, dumpster enclosures, etc., is necessary to minimize the  
7 possibility of utilities/landscaping conflicts. All power, telephone, streetlights, etc. shall  
8 be shown on construction drawings to facilitate identification and resolution of utility  
9 conflicts.

10 A copy of all recorded easements pertaining to the property is required. The designer  
11 must be sensitive to the existence or creation of utility easements within the project.  
12 Permanent structures not associated with the utility use—including rockeries—shall not  
13 be built within easements, unless approved by the City of Redmond.  
14

15 When construction drawings are submitted for review, eight (8) complete copies of the  
16 civil plans and two (2) sets of drainage computations and studies are required for a  
17 complete submittal. Only complete submittals will be accepted for review. (After the  
18 initial submittal, fewer copies may be required. If desired, you may contact Public  
19 Works at 556-2740 to determine the exact number required.)

20 At the time of construction drawing approval, a digital file of the drawings shall be  
21 submitted to the city. File format shall conform to the requirements identified under  
22 ‘October 2000 version Record Drawing Requirements’ (see below).  
23

24 2. A copy of all recorded easements pertaining to the property is required. Permanent  
25 structures including rockeries cannot be built over easements.  
26

27 3. Survey Control:

- 28 a. Vertical control: Elevations must be referenced to City of Redmond Datum. This  
29 Datum is based on the U.S.C. & G.S. benchmark B-385 (1927). The Surveyor must  
30 tie the project to two numbered benchmarks. A publication of the benchmarks may

be purchased from the City's Public Works service counter under the name City of Redmond Vertical Control Survey February 1990.

b. Horizontal control: The surveyor shall tie the project to two City of Redmond horizontal control monuments. The plans shall show NAD 83-91 coordinates on a minimum to two points at exterior lot/boundary corners. A publication of the Redmond City Horizontal Control Notebook dated 1993 can be purchased at the Public Works service counter.

c. Existing and New Monumentation: New survey monuments shall be installed at new street intersections, street tangent points and center of cul-de-sacs in accordance with the City of Redmond Standard Details. Existing monumentation must be identified on the construction plans and maintained by the contractor throughout the construction period.

4. Plan review and inspection fees: Commercial/Apartment - 120% of Building Permit Fee

5. STREET USE PERMIT is required for any work in the public right of way and shall be paid prior to the pre-construction conference and includes:

- A maximum of \$314 fee\* (subject to annual increase) for utility installation in the public right-of-way
- A posting of a \$250 cash bond for street cleaning

\* A 3% technology surcharge is applied as authorized by Ordinance No. 2090, and extended by resolution No. 1162 on December 3, 2002.

6. Performance Guarantee: A performance guarantee shall be provided in a form acceptable to the City for street, water, sewer and storm water improvements. An acceptable performance guarantee includes a performance bond, irrevocable letter of credit, or cash. (In some unusual circumstances assignment of loan proceeds may be acceptable.) The amount of the bond shall be 125% of the estimated cost. Only City of Redmond security forms are acceptable. The performance guarantee will not be released until letter from the Director of Public Works advises the developer that all conditions of approval have been met. In addition to the street use permit, a performance guarantee shall be posted with the City for the following uses:

**T-Mobile Redmond Way Monopole 19 of 25  
6/18/2003**

**City of Redmond  
Office of the Hearing Examiner  
P.O. Box 97010  
Redmond, WA 98073-9710**

- 1 a) Street and utility improvements within the public right-of-way. The amount of  
2 the security shall be determined by the applicant and approved by the City.
- 3 b) Prior to the issuance of any tenant improvement permit or occupancy permit a  
4 City approved Letter of Credit or Cash Deposit shall be posted with the City for  
5 all uncompleted on-site improvements. The amount of the Letter of Credit or  
6 Cash Deposit shall be determined by the applicant and approved by the City. In  
7 the event the street and utility Record Drawings plans have not been submitted  
8 and accepted at this time a cash bond shall be posted to ensure future submittal.  
9 The minimum amount shall be \$5,000, or as determined by the Engineering  
10 Division. The deposit for sets having a large number of sheets shall be established  
11 at \$1,000 per sheet, not to exceed \$25,000.

12 7. Record Drawing Requirements (Oct. 2000 Version)

13 One of the important steps upon the completion of construction improvements in the City  
14 of Redmond is a submittal of Record Drawings. The drawings are important assets to the  
15 City as well to its residents and customers. They are used for many purposes, ranging  
16 from indicating what was actually constructed in the field to helping locate facilities  
17 during emergency situations.

- 18 a. *What items shall be included?:* Record drawings will show accurate locations of storm,  
19 sewer, water mains and other water appurtenances, structures, conduits, power poles,  
20 light standards, vaults, width of streets, sidewalks, landscaping areas, building footprints,  
21 channelization and pavement markings, property lines, easements, etc.
- 22 b. *What are the accuracy requirements?:* The drawing will be accurately located in state  
23 plane coordinates using NAD-83-91 survey control and tied to any 2 City of Redmond  
24 Horizontal Control Monuments. The following is a partial list of the construction items  
25 and tolerance limits to be incorporated into the Record Drawings. Other items and  
26 tolerances shall be required depending on the type of improvements constructed.
- 27 • Surveyed Sewer and Storm water elevations..... +/-0.01'  
28 Includes pipe invert elevations, top of castings (manholes, inlets, etc.)
  - 29 • Surveyed Water elevations..... +/-0.25'
  - 30 • Horizontal and vertical alignment..... +/-0.1'

c. *What is required from you?:* The Record Drawing delivery shall be in electronic as well as in hard copy format. Each drawing, except for the Digital file, shall bear the P.E./P.L.S. Stamp, Signature and Date and be reproduced on the following media:

Preliminary Submittal:

- Two sets of full size prints.
- Digital files with drawing/layer documentation.

Final Submittal:

- Full size PHOTOGRAPHIC MYLAR Sepia or Xerox Mylar will not be accepted.
- 11"x17" PHOTOGRAPHIC MYLAR, matt finish preferred.
- 8-1/2"x11" PHOTOGRAPHIC NEGATIVE
- Three sets of full size PRINTS.
- Digital files with drawing/layer documentation.

d. *How does the Preliminary Record Drawing Submittal and Review Process work?:* Upon completion of improvements and prior to project acceptance, Record Drawings in digital and hard copy format shall be submitted for review and approval.

- Submit 1 digital copy and 2 hard copy sets for review to Engineering Division, 3rd Floor, City Hall, Please call (425) 556-2735 if you have any questions.
- If review of the preliminary Record drawings reveals errors and/or omissions, the digital files and drawings (redlines copies) will be returned to the Engineer/Surveyor for corrections. The Engineer/Surveyor shall make all corrections in the digital copy of the original construction plans and re-plot the hard copy. Please resubmit the digital files, two revised plans sets derived from the revised digital files and redlines for re-review. Upon approval of preliminary record drawings, the Engineer/Surveyor will be notified by the Public Works, Engineering department to proceed with the "Final Submittal".

e. *Who should approve the final drawings before submitting it to the City?:* The final drawings shall be prepared and stamped by a Professional Engineer and/or Professional Land Surveyor currently licensed in the State of Washington verifying that all improvements have been built in accordance with the approved construction plans and that all changes will be accurately noted in the digital file on the

appropriate plan sheets and detailed drawings. The hard copy submittal derived from the digital file shall reflect these changes.

f. *What should the electronic delivery include?*

- All sheets of the original digital construction plans with noted construction changes. The construction contractor and/or design consultant shall record all field changes and any existing utilities encountered during construction.
- All Record Drawing changes will be made in the digital format.
- Changes to text: invert elevations, dimensions, notes, etc. will be lined out with the Record Drawing text placed above it. Do not alter, modify or erase original approved design text.
- Changes made to Graphic features: pipe, catch basins, hydrants, etc. shall be moved to reflect their accurate surveyed locations.
- An overall digital site plan.
- A detailed digital and/or hard copy list of drawing files with the corresponding layers/levels and their contents will be included with the digital drawing file. The list shall include but not be limited to: Digital File names, Drawing names (logical), Level number/Layer name and Level/Layer description.

g. *Do Record Drawing changes need to be made in the Original Digital Construction Drawing?:* Yes, all changes need to be made to the original City Approved digital Construction files and then re-plotted to create the hard copy submittal. Digital Record Drawings created from anything other than the digital construction drawings will not be accepted. Hand drafted changes to Mylar or paper copy submittals will not be accepted.

h. *What format should the electronic delivery be in?*

- Digital files shall be provided in a version of MicroStation ".DGN" (preferred), or AutoCAD (".DWG" format) deemed acceptable by the City. All support files required to display or plot the files in the same manner as they were developed shall be delivered along with these files. These files include but are not limited to (MicroStation) Customized Line Styles libraries, Cell Libraries, Font Libraries, Pen Tables and Referenced Files, (AutoCAD) Block Libraries, Font Files, Menu Files, Plotter Setup and Referenced Files. Do not include P.E./P.L.S. stamps, signature and border files. Scanned hard

copy drawings using raster to vector conversions will not be acceptable digital format.

- The files will be submitted on a recordable compact disc (preferred) or MS-DOS formatted 3.5" floppy disk(s). Each disc will be labeled with the project name and the name of the company that prepared them.
- The drawing will be at full scale. Microstation working units will be set to 1:1000 with Master units set to "ft" for site plans; The drawing will be accurately located in state plane coordinates using NAD-83-91 survey control and tied to any 2 City of Redmond Horizontal Control Monuments.
- i. *What should the hard copy delivery include?*
  - Three sets of prints derived from the Record drawing digital file will include the Stamp, Signature and Date of the Professional Engineer or Professional Land Surveyor that prepared the Record drawing document.
  - Record drawing submittals are to include all sheets of original city approved construction drawings except TESCP and City Standard Details, i.e.: Title sheet, Plan(s), Profile(s), Sensitive Areas/Wetlands and Site Specific Details.
- j. *Where do you submit your Record Drawings?*

Public Works Development Services Division  
2nd floor Redmond City Hall  
15670 N.E. 85<sup>th</sup> Street  
Redmond, WA 98073-9710
- k. *Who do you contact if you have additional questions?:* Please call the Public Works Engineering Division (425) 556-2740 if you have any questions.

## B. Construction Requirements

1. Installation of all street and utility improvements shall be to City of Redmond standards.
  2. Prior to construction a pre-construction conference shall be held with the City.
- A minimum of one (1) week of advance notice is required to arrange this meeting.
  - Construction drawing approval and print distribution to the Construction Engineering Division must occur before the pre-construction conference is scheduled.
3. Unless otherwise specified, hours of construction shall be limited from 7:00 a.m. to 7:00 p.m., Monday through Friday and 9:00 a.m. to 6:00 p.m. on

Saturday. No work is permitted on Sunday. This shall apply to plat construction improvements (street and utility improvements) and exterior home construction only. Residential home construction (i.e. painting, drywall, etc.) working hours may be different. All construction work is enforced by the Redmond Community Development Guide Section 20D.100 (Noise Control). Any construction equipment that does not meet Redmond's Noise Control shall have mufflers.

4. Construction activities may be limited or suspended during the rainy season (October 1 - April 30).

## **II. CLEARING/GRADING AND STORMWATER MANAGEMENT**

Contact: Jeff Dendy

Phone: 425-556-2890

Email: [jdendy@ci.redmond.wa.us](mailto:jdendy@ci.redmond.wa.us)

### **A. Design Requirements to be Completed Prior to Permit:**

1. Erosion control systems must be implemented throughout the construction process and until the site is stabilized. Design of all systems must be in accordance with section 20E.90.10 of the Community Development Guide and the most recent issue of the City of Redmond STORMWATER MANAGEMENT AND EROSION CONTROL TECHNICAL NOTEBOOK (notebook). Contact the Stormwater Division at 556-2890 for information about, or a copy of, the notebook. Preferred methods for management and control are discussed in the notebook.
2. Stormwater Management: Tie enclosure runoff to the City of Redmond stormsewer system.
3. Site grading shall not exceed a slope of 3 horizontal to one vertical measure, (3 to 1).
4. Coordinate Civil and Landscape Plans, trees can not lie closer than 8 feet to storm pipes. For trees planted within 8 feet of concrete detention vault; provide statement from the structural engineer that the vault design can accommodate the trees over a 50-year project life.

### **B. Fees to be Paid Prior to Permit**

Fees must be paid for construction drawing review and for construction inspection.

Based upon the plans presented, the project is classified as a Small Project. The Clearing, Grading And Stormwater Management Fees are estimated to be **\$292**, based on review of a Private Drainage System. A deposit equal to that amount is due and payable when construction drawings are presented for review. The construction drawing review fee will be adjusted to account for plan changes during review and will be determined prior to drawing approval. If the adjustments cause the fee to exceed the deposit, the balance due must be paid prior to approval of drawings. If adjustments result in a final figure less



1 than the deposit, the overpayment may be credited against the subsequent fee below or  
2 will be refunded.

3 Based upon the current estimate, the total storm water review and inspection fees for this  
4 project will be approximately **\$292.00**. Crediting the project with the initial deposit of  
5 **\$304**, the total amount due will be approximately **\$12.00, credit**.

6 C. Miscellaneous

- 7 1. Construction activities may be limited or suspended during the rainy season (October 1 –  
8 April 30).  
9 2. Two complete copies of plans, computations, and studies are required for a complete  
10 submittal. Only complete submittals will be accepted for review.  
11 3. A copy of the conditions of approval (this letter) must accompany all Grading and Storm  
12 drainage plan submittals.

13 **III. PUBLIC WORKS-UTILITIES**

14 A. Water and Sewer:

- 15  
16 1. Show all existing water mains and sewer mains in 140<sup>th</sup> AVE. NE. and in Redmond Way  
17 that are within 100 feet from the project boundaries.  
18  
19 2. Show existing PRV station at 140<sup>th</sup> AVE. NE.  
20  
21 3. Maintain 10 feet horizontal separation between the fence for the proposed ground facility  
22 and existing water mains and sewer mains.  
23  
24 4. Maintain 10 feet separation between proposed wireless communication monopole and  
25 existing water mains and sewer mains.  
26  
27 5. Maintain 8 feet horizontal separation between any trunk of proposed landscape trees and  
28 existing water mains and sewer mains.  
29  
30